at a first time when the mobile device is not in a similar orientation of the sample and capture guide, determining to not capture the initial sample image; and

at a second time when the mobile device is in a similar orientation of the sample and capture guide, capturing the initial sample image, without user input to capture the initial sample image at the second time.

14. The method of claim **1** comprising:

detecting a computer-readable indication shown on the capture guide area of the initial sample image; and

determining a first direction for a sample shown in the sample area using the computer-readable indication.

15. The method of claim **1** comprising:

comparing, based on two different white point markers that are visible in the initial sample image, a chromaticity differential for the two different white point markers;

determining, based on the chromaticity differential, a chromaticity gradient to compensate for the chromaticity differential; and

applying the chromaticity gradient over the initial sample image by adjusting chromaticity values.

16. The method of claim **1** comprising:

comparing, based on two different color markers of a single color that are visible in the initial sample image, a color differential for the two different color markers;

determining, based on the color differential, a color gradient to compensate for the color differential; and

applying the color gradient over the initial sample image by adjusting color values.

17. The method of claim **1** comprising:

comparing, based on two different white point markers that are visible in the initial sample image, a chromaticity differential for the two different white point markers;

determining, based on the chromaticity differential, a chromaticity gradient to compensate for the chromaticity differential;

applying the chromaticity gradient over the initial sample image by adjusting chromaticity values;

comparing, based on two different color markers of a single color that are visible in the initial sample image, a color differential for the two different color markers;

determining, based on the color differential, a color gradient to compensate for the color differential; and

applying the color gradient over the initial sample image by adjusting color values.

18. The method of claim **17** wherein applying the chromaticity gradient is before applying the color gradient.

19. The method of claim **1** comprising:

converting the sample swatch area into a grayscale layer;

receiving selection of a base color;

applying a base color layer to at least a portion of the grayscale layer, wherein the applied base color matches the intensity of an original color of the sample swatch area.

20. The method of claim **1** comprising:

receiving selection of a first area from the sample swatch area or the initial sample image and a selected color space;

translating, from a color at the first area, to a matching color identifier in the selected color space; and

storing as metadata with the sample swatch area or the initial sample image the matching color identifier.

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